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1	US 20040138811 A1	20040715	ZI 3	Gps receiver apparatus and receiving method	701/213		Teranishi, Koichiro et al.
2	US 20040086070 A1	20040506	113	Circuit sharing for frequency and phase error correction	375/375	11/1/1/9	Sachse, Eric et al.
3	US 20030215031 A1	20031120		High speed modem for a communication network	375/340	1	Schaumont, Patrick et al.
4	US 20030185286 A1	20031002	17X	Matched filter-based handoff method and apparatus	375/152		Yuen, Elmer
5	US 20030118081 A1	20030626	69	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130		Philips, Lieven et al.
6	US 20030086515 A1	20030508	196	Channel adaptive equalization precoding system and method	375/346	·	Trans, Francois et al.
7	US 20030016770 A1	20030123	195	Channel equalization system and method	375/346		Trans, Francois et al.
8	US 20030016767 A1	20030123	11/	Phase tracker for linearly modulated signal	375/326	375/327	Houtman, Tom
9	US 20020126748 A1	20020912	18	Carrier phase recovery system for adaptive burst modems and link hopping radio networks	375/229		Rafie, Manouchehr S. et al.
10	US 20020122505 A1	20020905		Frequency and phase estimation	375/329		Avidor, Dan et al.
11	US 20020067783 A1	20020606		Apparatus for estimating phase information using matched filter in communication system and method thereof	375/343		Sung, Sang Hun
12	US 20020067757 A1	20020606	67	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130		Philips, Lieven et al.
13	US 6778613 B2	20040817		Frequency and phase estimation for MPSK signals	375/329	329/304; 375/344	Avidor; Dan et al.

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14	US 6772181 B1	20040803	111	trigonometric interpolation	708/313	リノひの/ とタロー	Fu; Dengwei et al.
15	US 6597727 B2	20030722	62	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/147	375/222; 375/316	Philips; Lieven et al.
16	US 6584147 B1	20030624		High speed modem for a communication network	375/220		Schaumont; Patrick et al.
17	US 6430235 B1	20020806	H /	Non-data-aided feedforward timing synchronization method	375/326	370/516; 375/355; 375/371	O'Shea; Deirdre et al.
18	US 6426977 B1	20020730	39	System and method for applying and removing Gaussian covering functions	375/259		Lee; Harry B. et al.
19	US 6421399 B1	20020716	117	Frequency and phase estimation for MPSK signals		375/260; 375/343	Avidor; Dan et al.
20	US 6400757 B1	20020604	27	Symbol-matched filter having a low silicon and power management	375/152		Tran; Jimmy Cuong et al.
21	US 6393049 B1	20020521		Two-stage synchronization of spread-spectrum signals		375/143; 375/144; 375/145	Davidovici; Sorin et al.
22	US 6324207 B1	20011127	151	Handoff with closed-loop power control	375/141	370/332; 375/225; 455/436; 455/437; 455/522	Kanterakis; Emmanuel et al.

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23	US 6317452 B1	20011113	66	Method and apparatus for wireless spread spectrum communication with preamble sounding gap		375/141; 375/145	Durrant; Randolph L. et al.
24	US 6307877 B1	20011023	61	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130	375/222	Philips; Lieven et al.
25	US 6304592 B1	20011016	28	Coherent detection using matched filter enhanced spread spectrum demodulation	375/152		Davidovici; Sorin et al.
26	US 6282228 B1	20010828	XII	Spread spectrum codes for use in communication	375/140	327/164; 375/141	Monroe; Robert
27	US 6215811 B1	20010410	174	Store and dump, spread-spectrum handoff	375/143	370/412; 375/142; 375/150; 375/152; 455/436	Yuen; Elmer
28	US 6212566 B1	20010403	inu -	Interprocess communication protocol system modem	709/230	709/200; 709/231; 709/237; 712/1	Vanhoof; Jan et
29	US 6154483 A	20001128	29	Coherent detection using matched filter enhanced spread spectrum demodulation	375/130	370/336; 375/376; 708/314	Davidovici; Sorin et al.
30	US 6067319 A	20000523	23	Method for equalization of a quadrature amplitude modulated signal	375/232	370/350; 375/233; 375/348	Copeland; Gregory Clark

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31	US 6021157 A	20000201	1711	Fast phase estimation in digital communication systems	375/147	329/304; 375/324; 375/329	Kanterakis; Emmanuel et al.
32	US 5999562 A	19991207	1//	Intelligent power management for a programmable matched filter			Hennedy; Michael et al.
33	US 5970092 A	19991019	8	Adaptively equalized burst receiver and method for upstream broadband data	375/232	375/324	Currivan; Bruce
34	US 5963586 A	19991005	68	Method and apparatus for parallel noncoherent correlation of a spread spectrum signal	375/142	375/274; 375/336; 375/343	Randolph L. et
35	US 5953370 A	19990914	66	Apparatus for receiving and correlating a spread spectrum signal	375/150		Durrant; Randolph L. et al.
36	US 5946359 A	19990831	1	Parameter measuring apparatus for digital quadrature modulation signals		329/304; 375/332; 375/340	Tajiri; Shinsuke et al.
37	US 5933447 A	19990803	29	Symbol-matched filter having a low silicon and power requirement	375/152	375/343	Tran; Jimmy Cuong et al.
38	US 5910960 A	19990608		Signal processing apparatus and method	714/784		Claydon; Anthony Peter J. et al.
39	US 5894494 A	19990413	1	Parallel correlator architecture for synchronizing direct sequence spread-spectrum signals	375/150		Davidovici; Sorin

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40	US 5881100 A	19990309		Method and apparatus for coherent correlation of a spread spectrum signal			Durrant; Randolph L. et al.
41	US 5872810 A	19990216		Programmable modem apparatus for transmitting and receiving digital data, design method and use method for said modem	375/222	13 / 3/1 31/	Philips; Lieven et al.
42	US 5872808 A	19990216		Apparatus and method for synchronization of direct sequence CDMA signals	375/152		Davidovici; Sorin et al.
43	US 5864578 A	19990126	127	Matched filter-based handoff method and apparatus	375/143	370/331; 370/412; 375/144; 455/436; 455/452. 2	Vuen: Elmer
44	US 5856998 A	19990105	67	Method and apparatus for correlating a continuous phase modulated spread spectrum signal	375/150	375/336; 375/343	Durrant; Randolph L. et al.
45	US 5832028 A	19981103	i	Method and apparatus for coherent serial correlation of a spread spectrum signal			Durrant; Randolph L. et al.
46	US 5828705 A	19981027	14	Carrier tracking technique and apparatus having automatic flywheel/tracking/reacquisition control and extended signal to noise ratio	375/326	375/316; 375/322; 375/324; 375/354; 375/355	Kroeger; Brian W. et al.
47	US 5802102 A	19980901	12	Programmable two-part matched filter for spread spectrum	375/152	375/343; 708/314	Davidovici; Sorin

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48	US 5764691 A	19980609	1//	Intelligent power management for a programmable matched filter	375/152		Hennedy; Michael et al.
49	US 5761210 A	19980602	ın x	Signal processing apparatus and method	714/701		Claydon; Anthony Peter J. et al.
50	US 5757847 A	19980526		Method and apparatus for decoding a phase encoded signal	375/150	375/331; 375/343	Durrant; Randolph L. et al.
51	US 5754585 A	19980519	67	Method and apparatus for serial noncoherent correlation of a spread spectrum signal	375/150	L	Durrant; Randolph L. et al.
52	US 5754584 A	19980519	67	Non-coherent spread-spectrum continuous-phase modulation communication system	375/142		Durrant; Randolph L. et al.
53	US 5742637 A	19980421	1711	Fast phase estimation in digital communication systems	375/147	329/304; 375/324; 375/329	Kanterakis; Emmanuel et al.
54	US 5717715 A	19980210		Signal processing apparatus and method	375/220	341/61	Claydon; Anthony Peter J. et al.
55	US 5715276 A	19980203		Symbol-matched filter having a low silicon and power requirement	375/152		Tran; Jimmy Cuong et al.
56	US 5692020 A	19971125	nu	Signal processing apparatus and method	375/350	708/313	Robbins; William P.
57	US 5692007 A	19971125	67	Method and apparatus for differential phase encoding and decoding in spread-spectrum communication systems with continuous-phase modulation	375/142	375/146; 375/150; 375/273; 375/283	Durrant; Randolph L. et al.

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58	US 5680414 A	19971021	67	Synchronization apparatus and method for spread spectrum receiver	375/150	370/515; 375/149; 375/152; 375/367	Durrant; Randolph L. et al.
59	US 5668831 A	19970916	1 / X	Signal processing apparatus and method	375/232		Claydon; Anthony Peter J. et al.
60	US 5659574 A	19970819	67	Multi-bit correlation of continuous phase modulated signals	375/150	375/336	Durrant; Randolph L. et al.
61	US 5648982 A	19970715	47	Spread spectrum transmitter	375/146	375/305	Durrant; Randy et al.
62	US 5635864 A	19970603	70	Comparator circuit	327/77	327/63	Jones; Anthony M.
63	US 5629956 A	19970513	67	Method and apparatus for reception and noncoherent serial correlation of a continuous phase modulated signal	375/150	375/336; 375/343	Durrant; Randolph L. et al.
64	US 5627856 A	19970506	67	Method and apparatus for receiving and despreading a	375/150	375/343	Durrant; Randolph L. et al.
65	US 5627855 A	19970506	116	Programmable two-part matched filter for spread spectrum	375/152	375/343; 708/314	Davidovici; Sorin
66	US 5625640 A	19970429	18	Apparatus for and method of broadcast satellite network return-link signal transmission	1	342/352; 370/316; 375/148; 375/152	Palmer; Larry C.
67	US 5610940 A	19970311	67	Method and apparatus for noncoherent reception and correlation of a continous phase modulated signal	375/150	14/7///4	Durrant; Randolph L. et al.

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68	US 5553064 A	19960903		High speed bidirectional digital cable transmission system	370/478		Paff; Thomas M. et al.
69	US 5301167 A	19940405	18	Apparatus for improved underwater acoustic telemetry utilizing phase coherent communications	367/134		Proakis; John G. et al.
70	US 5272446 A	19931221	23	Digitally implemented fast frequency estimator/demodulator for low bit rate maritime and mobile data communications without the use of an acquisition preamble			Chalmers; Harvey et al.
71	US 4807256 A	19890221	22	Global position system receiver	375/344	ľ	Holmes; Jerry D. et al.